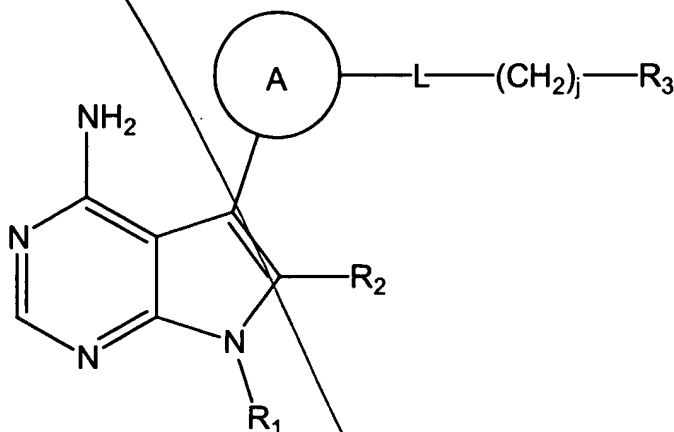


1. (Twice Amended) A compound represented by the following structural formula:



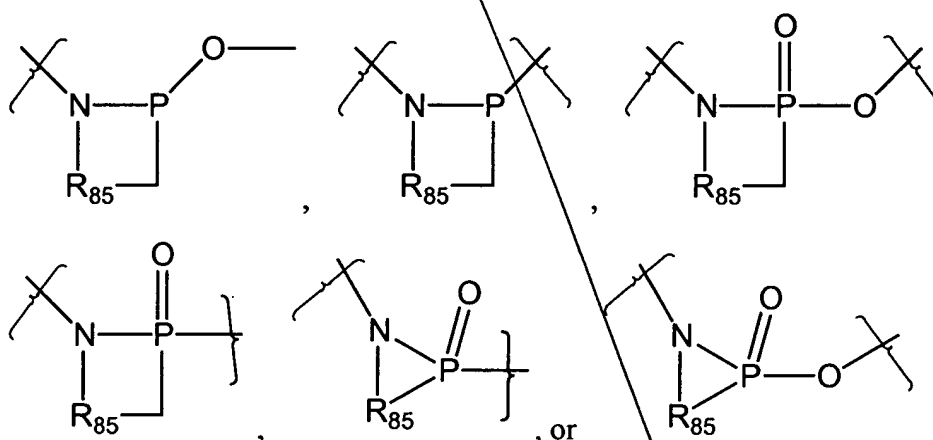
or pharmaceutically acceptable salts thereof, wherein:

Ring A is a six membered aromatic ring or a five or six membered heteroaromatic ring which is substituted with one or more substituents selected from the group consisting of a substituted or unsubstituted aliphatic group, a halogen, a substituted or unsubstituted aromatic group, substituted or unsubstituted heteroaromatic group, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted aralkyl, substituted or unsubstituted heteroaralkyl, cyano, nitro, -NR<sub>4</sub>R<sub>5</sub>, -C(O)<sub>2</sub>H, a substituted or unsubstituted alkoxy carbonyl, -C(O)<sub>2</sub>-haloalkyl, a substituted or unsubstituted alkylthio, a substituted or unsubstituted alkylsulfinyl, a substituted or unsubstituted alkylsulfonyl, a substituted or unsubstituted arylthio, a substituted or unsubstituted arylsulfinyl, a substituted or unsubstituted arylsulfonyl, a substituted or unsubstituted alkyl carbonyl, -C(O)-haloalkyl, a substituted or unsubstituted aryloxy, a substituted or unsubstituted carboxamido, tetrazolyl, trifluoromethylsulphonamido, trifluoromethylcarbonylamino, a substituted or unsubstituted alkynyl, a substituted or unsubstituted alkyl amido or alkylcarboxamido; a substituted or unsubstituted aryl amido or arylcarboxamido, a substituted or unsubstituted styryl and a substituted or unsubstituted aralkyl amido or aralkylcarboxamido;

Sub  
PI  
CX  
L is -S-; -S(O)-; -S(O)<sub>2</sub>-; -N(C(O)OR)-; -N(C(O)R)-; -N(SO<sub>2</sub>R)-; -CH<sub>2</sub>O-; -CH<sub>2</sub>S-; -CH<sub>2</sub>N(R)-; -CH(NR)-; -CH<sub>2</sub>N(C(O)R)-; -CH<sub>2</sub>N(C(O)OR)-; -CH<sub>2</sub>N(SO<sub>2</sub>R)-; -CH(NHR)-; -CH(NHC(O)R)-; -CH(NHSO<sub>2</sub>R)-; -CH(NHC(O)OR)-; -CH(OC(O)R)-; -CH(OC(O)NHR)-; -CH=CH-; -C(=NOR)-; -C(O)-; -CH(OR)-; -C(O)N(R)-; -N(R)C(O)-; -NHC(O)R<sub>130</sub>-; -N(R)S(O)-; -N(R)S(O)<sub>2</sub>-; -NHSO<sub>2</sub>R<sub>130</sub>-; -OC(O)N(R)-; -N(R)C(O)N(R)-; -NRC(O)O-; -S(O)N(R)-; -S(O)<sub>2</sub>N(R)-; -N(C(O)R)S(O)-; -N(C(O)R)S(O)<sub>2</sub>-; -N(R)S(O)N(R)-; -N(R)S(O)<sub>2</sub>N(R)-; -C(O)N(R)C(O)-; -S(O)N(R)C(O)-; -S(O)<sub>2</sub>N(R)C(O)-; -OS(O)N(R)-; -OS(O)<sub>2</sub>N(R)-; -N(R)S(O)O-; -N(R)S(O)<sub>2</sub>O-; -N(R)S(O)C(O)-; -N(R)S(O)<sub>2</sub>C(O)-; -SON(C(O)R)-; -SO<sub>2</sub>N(C(O)R)-; -N(R)SON(R)-; -N(R)SO<sub>2</sub>N(R)-; -C(O)O-; -N(R)P(OR')O-; -N(R)P(OR')-; -N(R)P(O)(OR')O-; -N(R)P(O)(OR')-; -N(C(O)R)P(OR')O-; -N(C(O)R)P(OR')-; -N(C(O)R)P(O)(OR')O- or -N(C(O)R)P(OR')-, wherein R and R' are each, independently, -H, an acyl group, a substituted or unsubstituted aliphatic group, a substituted or unsubstituted aromatic group, a substituted or unsubstituted heteroaromatic group, or a substituted or unsubstituted cycloalkyl group and R<sub>130</sub> is an aliphatic group; or

L is -R<sub>b</sub>N(R)S(O)<sub>2</sub>-, -R<sub>b</sub>N(R)P(O)-, or -R<sub>b</sub>N(R)P(O)O-, wherein R<sub>b</sub> is an alkylene group which when taken together with the sulphonamide, phosphinamide, or phosphonamide group to which it is bound forms a five or six membered ring fused to ring A; or

L is represented by one of the following structural formulas:



wherein R<sub>85</sub> taken together with the phosphinamide, or phosphonamide is a 5-, 6-, or 7 - membered, aromatic, heteroaromatic or heterocycloalkyl ring system;

5h  
01  
R<sub>1</sub> is -H, 2-phenyl-1,3-dioxan-5-yl, a C1-C6 alkyl group, a C3-C8 cycloalkyl group, a C5-C7 cycloalkenyl group or an optionally substituted phen(C1-C6 alkyl) group, wherein the alkyl, cycloalkyl and cycloalkenyl groups are optionally substituted by one or more groups of formula -OR<sup>a</sup>; provided that -OR<sup>a</sup> is not located on the carbon attached to nitrogen;

R<sup>a</sup> is -H or a C1-C6 alkyl group or a C3-C6 cycloalkyl;

ct  
R<sub>2</sub> is -H, a substituted or unsubstituted aliphatic group, a substituted or unsubstituted cycloalkyl, a halogen, -OH, cyano, a substituted or unsubstituted aromatic group, a substituted or unsubstituted heteroaromatic group, a substituted or unsubstituted heterocycloalkyl, a substituted or unsubstituted aralkyl, a substituted or unsubstituted heteroaralkyl, -NR<sub>4</sub>R<sub>5</sub>, or -C(O)NR<sub>4</sub>R<sub>5</sub>;

R<sub>3</sub> is a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted aromatic group, a substituted or unsubstituted heteroaromatic group, or a substituted or unsubstituted heterocycloalkyl; or L is -NRSO<sub>2</sub>-, -NRC(O)-, -NRC(O)O-, -S(O)<sub>2</sub>NR-, -C(O)NR- or -OC(O)NR-, and R<sub>3</sub> is substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl or substituted or unsubstituted aralkyl;

provided that j is 0 when L is -CH<sub>2</sub>NR-, -C(O)NR- or -NRC(O)- and R<sub>3</sub> is azacycloalkyl or azaheteroaryl; and

R<sub>4</sub>, R<sub>5</sub> and the nitrogen atom together form a 3, 4, 5, 6 or 7-membered, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted heterobicycloalkyl or a substituted or unsubstituted heteroaromatic; or

R<sub>4</sub> and R<sub>5</sub> are each, independently, -H, azabicycloalkyl, a substituted or unsubstituted alkyl group or Y-Z;

Y is selected from the group consisting of -C(O)-, -(CH<sub>2</sub>)<sub>p</sub>-, -S(O)<sub>2</sub>-, -C(O)O-, -SO<sub>2</sub>NH-, -CONH-, (CH<sub>2</sub>)<sub>p</sub>O-, -(CH<sub>2</sub>)<sub>p</sub>NH-, -(CH<sub>2</sub>)<sub>p</sub>S-, -(CH<sub>2</sub>)<sub>p</sub>S(O)-, and -(CH<sub>2</sub>)S(O)<sub>2</sub>-;

p is an integer from 0 to 6;

Z is a substituted or unsubstituted alkyl, substituted or unsubstituted amino, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl or substituted or unsubstituted heterocycloalkyl group; and

j an integer from 0 to 6.

3. (Amended) The compound of Claim 2 wherein  $R_3$  is substituted with one or more substituents selected from the group consisting of F, Cl, Br, I,  $CH_3$ ,  $NO_2$ ,  $OCF_3$ ,  $OCH_3$ , CN,  $CO_2CH_3$ ,  $CF_3$ , t-butyl, pyridyl, substituted or unsubstituted oxazolyl, substituted or unsubstituted benzyl, substituted or unsubstituted benzenesulfonyl, substituted or unsubstituted phenoxy, substituted or unsubstituted phenyl, substituted or unsubstituted amino, carboxyl, substituted or unsubstituted tetrazolyl, styryl, -S-(substituted or unsubstituted aryl), -S-(substituted or unsubstituted heteroaryl), substituted or unsubstituted heteroaryl, substituted or unsubstituted heterocycloalkyl, alkynyl,  $-C(O)NR_fR_g$ ,  $R_c$ , and  $CH_2OR_c$ ;

2 wherein  $R_f$ ,  $R_g$  and the nitrogen atom together form a 3, 4, 5, 6 or 7-membered, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted heterobicycloalkyl or a substituted or unsubstituted heteroaromatic  $R_f$  and  $R_g$  are each, independently, -H, a substituted or unsubstituted aliphatic group or a substituted or unsubstituted aromatic group; and

$R_c$  is hydrogen, or substituted or unsubstituted alkyl or substituted or unsubstituted aryl, - $W-(CH_2)_t-NR_dR_e$ ,  $-W-(CH_2)_t-O-alkyl$ ,  $-W-(CH_2)_t-S-alkyl$ , or  $-W-(CH_2)_t-OH$ ;

$t$  is an integer from 0 to 6;

$W$  is a bond or -O-, -S-,  $-S(O)-$ ,  $-S(O)_2-$ , or  $-NR_k-$ ;

$R_k$  is -H or alkyl; and

$R_d$ ,  $R_e$  and the nitrogen atom to which they are attached together form a 3, 4, 5, 6 or 7-membered substituted or unsubstituted heterocycloalkyl or substituted or unsubstituted heterobicyclic group; or

$R_d$  and  $R_e$  are each, independently, -H, alkyl, alkanoyl or -K-D;

$K$  is  $-S(O)_2-$ ,  $-C(O)-$ ,  $-C(O)NH-$ ,  $-C(O)_2-$ , or a direct bond;

$D$  is a substituted or unsubstituted aryl, a substituted or unsubstituted heteroaryl, a substituted or unsubstituted aralkyl, a substituted or unsubstituted heteroaromatic group, a substituted or unsubstituted heteroaralkyl, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted heterocycloalkyl, a substituted or unsubstituted amino, a substituted or unsubstituted aminoalkyl, a substituted or unsubstituted aminocycloalkyl,  $COOR_i$  or substituted or unsubstituted alkyl; and

$R_i$  is a substituted or unsubstituted aliphatic group or a substituted or unsubstituted aromatic group.

C3 5. (Amended) The compound of Claim 1, wherein ring A is selected from the group consisting of a substituted phenyl, a substituted naphthyl, a substituted pyridyl, and a substituted indole.

C3  
Sub D2 6. (Amended) The compound of Claim 5 wherein ring A is substituted with one or more substituent selected from the group consisting of F, Cl, Br, I, CH<sub>3</sub>, NO<sub>2</sub>, CN, CO<sub>2</sub>CH<sub>3</sub>, CF<sub>3</sub>, t-butyl, pyridyl, substituted or unsubstituted oxazolyl, substituted or unsubstituted benzyl, substituted or unsubstituted benzenesulfonyl, substituted or unsubstituted phenoxy, substituted or unsubstituted phenyl, substituted or unsubstituted amino, carboxyl, substituted or unsubstituted tetrazolyl, styryl, -S-(substituted or unsubstituted aryl), -S-(substituted or unsubstituted heteroaryl), substituted or unsubstituted heteroaryl, substituted or unsubstituted heterocycloalkyl, alkynyl, -C(O)NR<sub>f</sub>R<sub>g</sub>, R<sub>c</sub> and CH<sub>2</sub>OR<sub>c</sub>.

R<sub>f</sub>, R<sub>g</sub> and the nitrogen atom together form a 3, 4, 5, 6 or 7-membered, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted heterobicycloalkyl or a substituted or unsubstituted heteroaromatic; or

R<sub>f</sub> and R<sub>g</sub> are each, independently, -H, a substituted or unsubstituted aliphatic group or a substituted or unsubstituted aromatic group; and

R<sub>c</sub> is hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, -W-(CH<sub>2</sub>)<sub>t</sub>-NR<sub>d</sub>R<sub>e</sub>, -W-(CH<sub>2</sub>)<sub>t</sub>-O-alkyl, -W-(CH<sub>2</sub>)<sub>t</sub>-S-alkyl, or -W-(CH<sub>2</sub>)<sub>t</sub>-OH;

t is an integer from 0 to 6;

W is a bond or -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, or -NR<sub>k</sub>-;

R<sub>k</sub> is -H or alkyl; and

R<sub>d</sub>, R<sub>e</sub> and the nitrogen atom to which they are attached together form a 3, 4, 5, 6 or 7-membered substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted heterobicycloalkyl or a substituted or unsubstituted heteroaromatic; or

R<sub>d</sub> and R<sub>e</sub> are each, independently, -H, alkyl, alkanoyl, or -K-D;

K is -S(O)<sub>2</sub>-, -C(O)-, -C(O)NH-, -C(O)<sub>2</sub>-, or a direct bond;

D is a substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted aralkyl, substituted or unsubstituted heteroaromatic group, substituted or unsubstituted heteroaralkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted amino, substituted or unsubstituted

Sub  
D2  
aminoalkyl, substituted or unsubstituted aminocycloalkyl, COOR<sub>i</sub>, or a substituted or unsubstituted alkyl; and

R<sub>i</sub> is a substituted or unsubstituted aliphatic group or a substituted or unsubstituted aromatic group.

7. (Amended) The compound of Claim 6, wherein ring A is a substituted phenyl.

C3  
8. (Amended) The compound of Claim 1, wherein R<sub>1</sub> is a cyclopentyl group, a hydroxycyclopentyl or an isopropyl.

C4 Sub  
D3  
11. (Twice Amended) The compound of Claim 1, wherein L is -NHSO<sub>2</sub>R<sub>130</sub>-, -NHC(O)O-, or -NHC(O)R<sub>130</sub>-.

**Please cancel claims 12 – 45 without waiver or prejudice.**

**Please add new claims 49 – 52 as follows:**

49. (New) A compound according to claim 1 wherein A is a five or six membered heteroaromatic ring.

C5  
50. (New) A compound according to claim 1 wherein L is -N(C(O)OR)-; -N(C(O)R)-; -N(SO<sub>2</sub>R)-; -CH<sub>2</sub>O-; -CH<sub>2</sub>S-; -CH<sub>2</sub>N(R)-; -CH(NR)-; -CH<sub>2</sub>N(C(O)R)-; -CH<sub>2</sub>N(C(O)OR)-; -CH<sub>2</sub>N(SO<sub>2</sub>R)-; -CH(NHR)-; -CH(NHC(O)R)-; -CH(NHSO<sub>2</sub>R)-; -CH(NHC(O)OR)-; -CH(OC(O)R)-; -CH(OC(O)NHR)-; -CH=CH-; -C(=NOR)-; -C(O)-; -CH(OR)-; -NHC(O)R<sub>130</sub>-; -N(R)S(O)-; -NHSO<sub>2</sub>R<sub>130</sub>-; -OC(O)N(R)-; -S(O)N(R)-; -N(C(O)R)S(O)-; -N(C(O)R)S(O)<sub>2</sub>-; -N(R)S(O)N(R)-; -N(R)S(O)<sub>2</sub>N(R)-; -C(O)N(R)C(O)-; -S(O)N(R)C(O)-; -S(O)<sub>2</sub>N(R)C(O)-; -OS(O)N(R)-; -OS(O)<sub>2</sub>N(R)-; -N(R)S(O)O-; -N(R)S(O)<sub>2</sub>O-; -N(R)S(O)C(O)-; -N(R)S(O)<sub>2</sub>C(O)-; -SON(C(O)R)-; -SO<sub>2</sub>N(C(O)R)-; -N(R)SON(R)-; -N(R)SO<sub>2</sub>N(R)-; -N(R)P(OR')O-; -N(R)P(OR')-; -N(R)P(O)(OR')O-; -N(R)P(O)(OR')-; -N(C(O)R)P(OR')O-; -N(C(O)R)P(OR')-;

-N(C(O)R)P(O)(OR')O- or -N(C(O)R)P(OR')-, wherein R and R' are each, independently, -H, an acyl group, a substituted or unsubstituted aliphatic group, a substituted or unsubstituted aromatic group, a substituted or unsubstituted heteroaromatic group, or a substituted or unsubstituted cycloalkyl group and R<sub>130</sub> is an aliphatic group.

CS 51. (New) A compound according to claim 1 wherein R<sub>3</sub> is a substituted or unsubstituted cycloalkyl, or a substituted or unsubstituted heterocycloalkyl; or L is NRSO<sub>2</sub>-, NRC(O)-, -NRC(O)O-, -S(O)<sub>2</sub>NR-, -C(O)NR- or -OC(O)NR-, and R<sub>3</sub> is substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl or substituted or unsubstituted aralkyl.

52. (New) The compound N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2-(trifluoromethoxy)-1-benzenesulfonamide.

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